IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

| | | |
|---|---|---|
| In re Application of: | ) | Art Unit: 1646 |
| | ) | |
| BOCK, et al. | ) | Examiner: LI, RUIXIANG |
| | ) | |
| Serial No.: 10/539,440 | ) | Washington, D.C. |
| | ) | |
| Filed: June 20, 2005 | ) | November 13, 2007 |
| | ) | |
| For: METHOD OF MODULATION OF INTERACTION BETWEEN RECEPTOR AND LIGAND | ) | Docket No.: BOCK=8 |
| | ) | |
| | ) | Confirmation No.: 6815 |

**ELECTION WITH TRAVERSE**

U.S. Patent and Trademark Office
Customer Service Window
Randolph Building
401 Dulany Street
Alexandria, VA 22314

S i r :

In response to the restriction requirement mailed September 13, please enter the following response.

1. Applicants elect group I, with traverse. Groups I and II are related inventions under PCT rule 13.1 because the screening method of group II is used to identify compounds which can be used in the modulating method of claim I. Likewise, the molecular design method of group III can be used to identify compounds which can be so used.

2. In response to the requirement of election of a single FGF receptor and/or a single peptide, stated at OA pages 4-5, OA §3, applicants elect SEQ ID NO:9 with traverse.

The traversal is based on the following grounds.

2.1. This case is restricted under PCT unity rules. The particular FGF receptors and peptides are the subject of dependent claims, see e.g., claims 4, 8-12, 27 and 45. Under the PCT Administrative Instructions, Annex B, paragraph (c), "if the independent claims avoid the prior art and satisfy the requirement of unity of invention, no problem of lack of unity arises in respect of any claims that depend on the independent claims. Equally, no problem arises in the case of a

genus/species situation where the genus claim avoids the prior art". No showing of a posteriori lack of unity has been made.

2.2. The Examiner asserts that "the recited fibroblast growth factor receptors and peptides do not appear to have substantial structural similarity as a whole", but cites not a single sequence comparison in support of this assertion.

With regard to the fibroblast growth factor receptors, it is respectfully submitted that a protein is recognized as being an FGF receptor based on a combination of function (FGF binding) and structure (sequence similarity to a known FGF receptor).

Exhibit A is the result of a search on FGFR1, specifically with Swiss Prot Q9Q2M7, against the Homo sapiens section of the Swiss-Prot Database. It shows the top thousand scores and the top 50 alignments, without filtering out low-complexity regions. Comparison of Ex. A to the listing of receptors on pages 20-22 makes it clear that many if not all of these receptors are structurally related to FGFR1.

Exhibit B is a comparison of selected peptides with the elected SEQ ID NO:9. It is respectfully submitted that all of the listed peptides are sufficiently similar to SEQ ID NO:9 to warrant their rejoinder.

3. In response to the species restriction, based on claims 29-38, applicants elect "conditions of the central and peripheral nervous system", with traverse. While paragraph (f) nominally applies to "non-chemical alternatives", the subsequent discussion in sub paragraphs (i)-(iii) is exclusively of chemical alternatives. It is not clear how the examiner is extrapolating from structure/activity of a chemical compound to the recited diseases. It is well known in the art that a single clinical dysfunction may affect multiple tissues, organs or systems.

4. The claims of the elected group are claims 1, 4, 5, 8-15, 17, 18 and 20. Claim 17 requires a peptide. Of these claims, the only ones which explicitly identify the peptide are claims 18 and 20. Claim 18 reads on SEQ ID NO:9 and claim 20 does not. SEQ ID NO:9 is the FGFR binding motif of the FIII-1

domain of NCAM and it is therefore inferred to be able to interact with the receptors of claims 1, 4, 5, and 9. NCAM is listed in claim 8. Hence, the elected invention at least includes claims 1, 4, 5, 8, 9, 17 and 18. We reserve the right to present evidence that claims 10-15 read on the elected invention.

Respectfully submitted,

BROWDY AND NEIMARK, P.L.L.C.
Attorneys for Applicant

By:_____
Iver P. Cooper
Reg. No. 28,005

Enclosures
-Exhibits A and B

624 Ninth Street, N.W.
Washington, D.C. 20001
Telephone: (202) 628-5197
Facsimile: (202) 737-3528
IPC:lms
G:\ipc\g-i\hoib\BOCK8\pto election traverse.wpd